

Администрирование сетевых подсистем

Лабораторная работа №9

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1 декабря 2025

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Цели и задачи работы

Приобретение практических навыков установки, конфигурирования и проверки работы POP3/IMAP-сервера на базе Postfix и Dovecot.

Ход выполнения

```
Transaction test succeeded.  
Running transaction  
  Preparing      :                                1/1  
  Installing     : telnet-1:0.17-94.el10.x86_64    1/2  
  Running scriptlet: dovecot-1:2.3.21-16.el10.x86_64 2/2  
  Installing     : dovecot-1:2.3.21-16.el10.x86_64 2/2  
  Running scriptlet: dovecot-1:2.3.21-16.el10.x86_64 2/2  
  
Installed:  
  dovecot-1:2.3.21-16.el10.x86_64                telnet-1:0.17-94.el10.x86_64  
  
Complete!  
[root@server.dgavdadaev.net server]#
```

Рис. 1: Установка пакетов dovecot и telnet

```
15
16 # Default values are shown for each setting, it's not required to uncomment
17 # those. These are exceptions to this though: No sections (e.g. namespace {})
18 # or plugin settings are added by default, they're listed only as examples.
19 # Paths are also just examples with the real defaults being based on configure
20 # options. The paths listed here are for configure --prefix=/usr
21 # --sysconfdir=/etc --localstatedir=/var
22
23 # Protocols we want to be serving.
24
25 protocols = imap pop3|
26
```

Рис. 2: dovecot.conf — IMAP/POP3

```
95
96 # Space separated list of wanted authentication mechanisms:
97 #   plain login digest-md5 cram-md5 ntlm rpa apop anonymous gssapi otp
98 #   gss-spnego
99 # NOTE: See also disable_plaintext_auth setting.
100 auth_mechanisms = plain
101
```

Рис. 3: 10-auth.conf

```
5
6 # PAM authentication. Preferred nowadays by most systems.
7 # PAM is typically used with either userdb passwd or userdb static.
8 # REMEMBER: You'll need /etc/pam.d/dovecot file created for PAM
9 # authentication to actually work. <doc/wiki/PasswordDatabase.PAM.txt>
10 passwd {
11     driver = pam
12 }
13
14
15 ##
16 ## User databases
17 ##
18
19 userdb {
20     driver = passwd
21 }
22
```

Рис. 4: auth-system.conf.ext


```
15 # There are a few special variables you can use, eg.:
16 #
17 #   %u - username
18 #   %n - user part in user@domain, same as %u if there's no domain
19 #   %d - domain part in user@domain, empty if there's no domain
20 #   %h - home directory
21 #
22 # See doc/wiki/Variables.txt for full list. Some examples:
23 #
24 #   mail_location = maildir:~/Maildir
25 #   mail_location = mbox:~/mail:INBOX=/var/mail/%u
26 #   mail_location = mbox:/var/mail/%d/%1n/%n:INDEX=/var/indexes/%d/%1n/%n
27 #
28 # <doc/wiki/MailLocation.txt>
29 #
30
31 mail_location = maildir:~/Maildir
32
```

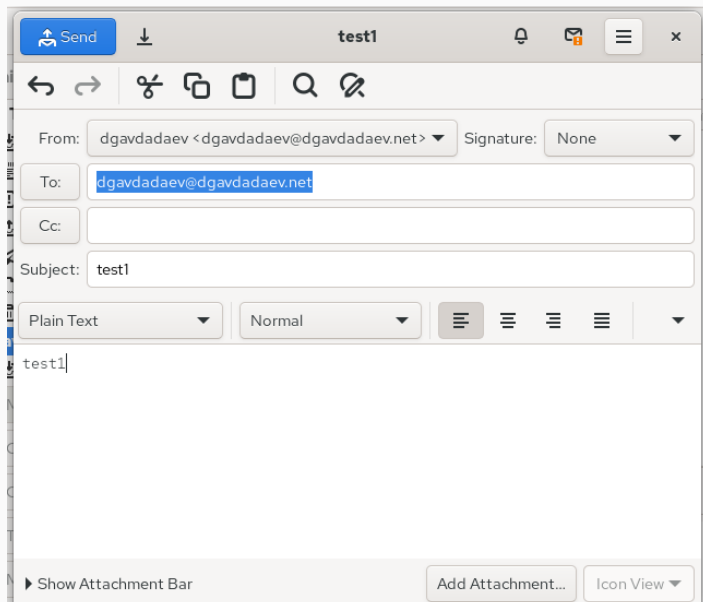
Рис. 5: 10-mail.conf

FirewallD: разрешение почтовых служб

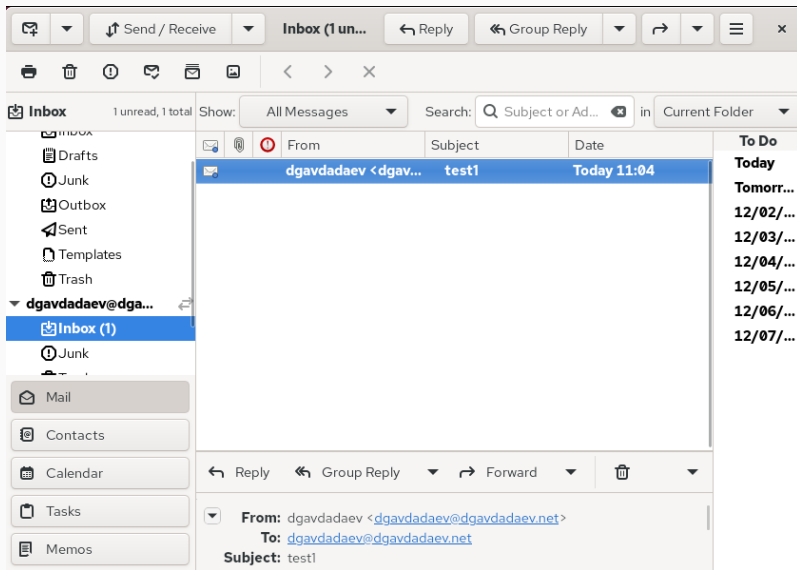
```
[root@server.dgavdadaev.net server]#  
[root@server.dgavdadaev.net server]# firewall-cmd --add-service=pop3 --permanent  
success  
[root@server.dgavdadaev.net server]# firewall-cmd --add-service=pop3s --permanent  
success  
[root@server.dgavdadaev.net server]# firewall-cmd --add-service=imap --permanent  
success  
[root@server.dgavdadaev.net server]# firewall-cmd --add-service=imaps --permanent  
success  
[root@server.dgavdadaev.net server]# firewall-cmd --reload  
success  
[root@server.dgavdadaev.net server]# firewall-cmd --list-services  
cockpit dhcp dhcpv6-client dns http https imap imaps pop3 pop3s smtp ssh ssh-custom  
[root@server.dgavdadaev.net server]# restorecon -vR /etc  
[root@server.dgavdadaev.net server]# systemctl restart postfix.service  
[root@server.dgavdadaev.net server]# systemctl enable dovecot  
Created symlink '/etc/systemd/system/multi-user.target.wants/dovecot.service' → '/usr/lib/systemd/system/dovecot.service'.  
[root@server.dgavdadaev.net server]# systemctl start dovecot  
[root@server.dgavdadaev.net server]# █
```

Рис. 6: Firewall настройки

Тестирование с клиента через Evolution



Тестирование с клиента через Evolution



```
Nov 30 11:04:35 server postfix/smtpd[19538]: warning: run-time library vs. compile-time header version mismatch: OpenSSL 3.5.0 may not be compatible with OpenSSL 3.2.0
Nov 30 11:04:35 server postfix/smtpd[19538]: connect from client.dgavdadaev.net[192.168.1.30]
Nov 30 11:04:35 server postfix/smtpd[19538]: DC8312034B68: client=client.dgavdadaev.net[192.168.1.30]
Nov 30 11:04:35 server postfix/cleanup[19544]: DC8312034B68: message-id=<c8cc1a17c58e712766c57981c5c6539f0ee14a43.camel@dgavdadaev.net>
Nov 30 11:04:35 server postfix/qmgr[18678]: DC8312034B68: from=<dgavdadaev@dgavdadaev.net>, size=559, nrcpt=1 (queue active)
Nov 30 11:04:35 server postfix/smtpd[19538]: disconnect from client.dgavdadaev.net[192.168.1.30] ehlo=1 mail=1 rcpt=1 data=1 quit=1 commands=5
Nov 30 11:04:35 server postfix/local[19545]: DC8312034B68: to=<dgavdadaev@dgavdadaev.net>, relay=local, delay=0.01, delays=0/0/0/0, dsn=2.0.0, status=sent (delivered to maildir)
Nov 30 11:04:35 server postfix/qmgr[18678]: DC8312034B68: removed
Nov 30 11:04:43 server dovecot[18890]: imap-login: Login: user=<dgavdadaev>, method=PLAIN, rip=192.168.1.30, lip=192.168.1.1, mpid=19573, TLS, session=<KMxt1M1ESNzAQAEe>
Nov 30 11:04:43 server dovecot[18890]: imap-login: Login: user=<dgavdadaev>, method=PLAIN, rip=192.168.1.30, lip=192.168.1.1, mpid=19578, TLS, session=<V05u1M1ETtzAQAEe>
```

Рис. 9: maillog: отправка и получение писем

```
[dgavdadaev@server.dgavdadaev.net ~]$  
[dgavdadaev@server.dgavdadaev.net ~]$ MAIL=~/.Maildir/ mail  
s-nail version v14.9.24. Type '?' for help  
/home/dgavdadaev/Maildir: 2 messages 1 unread  
      1 dgavdadaev          2025-11-30 11:04   18/668   "test1  
►U  2 dgavdadaev          2025-11-30 11:05   18/668   "test2  
& q  
Held 2 messages in /home/dgavdadaev/Maildir  
[dgavdadaev@server.dgavdadaev.net ~]$ █
```

Рис. 10: Maildir через mail

Проверка POP3 через Telnet

```
Escape character is '^['.
+OK Dovecot ready.
user dgavdadaev
+OK
pass 123456
+OK Logged in.
list
+OK 2 messages:
1 684
2 684
.
retr 1
+OK 684 octets
Return-Path: <dgavdadaev@dgavdadaev.net>
X-Original-To: dgavdadaev@dgavdadaev.net
Delivered-To: dgavdadaev@dgavdadaev.net
Received: from client.dgavdadaev.net (client.dgavdadaev.net [192.168.1.30])
    by server.dgavdadaev.net (Postfix) with ESMTP id DC8312034B68
    for <dgavdadaev@dgavdadaev.net>; Sun, 30 Nov 2025 11:04:35 +0000 (UTC)
Message-ID: <c8cc1a17c58e712766c57981c5c6539f0ee14a43.camel@dgavdadaev.net>
Subject: test1
From: dgavdadaev <dgavdadaev@dgavdadaev.net>
To: dgavdadaev@dgavdadaev.net
Date: Sun, 30 Nov 2025 11:04:35 +0000
Content-Type: text/plain
Content-Transfer-Encoding: 7bit
User-Agent: Evolution 3.52.4 (3.52.4-2.el10_1)
MIME-Version: 1.0

test1
.
dele 2
+OK Marked to be deleted.
quit
+OK Logging out, messages deleted.
Connection closed by foreign host.
[dgavdadaev@server.dgavdadaev.net ~]$
```

Выводы

Почтовая система на базе Postfix и Dovecot успешно установлена и настроена.

Проверена работа протоколов IMAP и POP3, отправка и получение писем в Evolution, доступ к сообщениям через **mail**, **doveadm** и Telnet.

Конфигурации интегрированы в Vagrant-окружение, а provisioning-скрипты дополнены автоматизацией настройки почтовых служб.

Работа почтового сервера подтверждена на всех уровнях тестирования.